

Appln. No. 10/751,561
Response dated 22 February 2006
Reply to Office Action of 22 November 2005

REMARKS/ARGUMENTS

Applicants thank the Office for indicating that Claims 15-26 are allowed.

The Office has objected to Claims 1-13 due to the recitation of "sufficient to" language in the claims and the Office's suggestion that use of such language "is not a positive limitation . . . in any patentable sense". Applicants amend Claim 1 to delete the "sufficient to" language for thickness and to recite that the thickness must be at least 0.25 inch (0.635 cm). The amendment draws support from the specification at page 18, lines 3-5. With such support, the amendment does not add new matter. Claim 1 also recites that the body must be "*sufficiently flexible* to withstand bending at a 90° angle without cracking or rupturing either major surface or sealing off fluid communication via the grooves, conduits or both ..." (emphasis added). In addition, Claim 1 recites that the body must have "a modulus *sufficient to* allow the assembly to rebound by at least 20° when bent at said 90° angle . . ." (emphasis added).

Applicants respectfully submit that such use of "sufficiently flexible" and "sufficient to" in the stated context of Claim 1 are "positive limitations" and that one of ordinary skill in the art would understand these limitations in light of the specification and be reasonably apprised of the scope of the invention. Due to the various potential materials of construction and configurations for Applicants' claimed flexible foam body, use of such function descriptors is appropriate and sufficiently definitive such that one of skill in the art could easily determine whether a selected flexible polyolefin foam has the requisite flexibility and modulus when used in a particular assembly configuration. The examples and comparative example on pages 26 and 27 are illustrations of the difference between a body that has sufficient flexibility and modulus versus one that does not. Therefore, Applicants respectfully request the Office to remove its objection to Claims 1-13.

Applicants also amend Claim 1 to clarify that the grooves form alternating continuous ridges that separate the grooves from each other between the first and second ends. The amendment draws support from the specification at numerous locations including Figures 1-13, page 9, lines 20-25, page 12, lines 11-20, page 15,

Appln. No. 10/751,561
Response dated 22 February 2006
Reply to Office Action of 22 November 2005

lines 20-25, and page 19, lines 13-20. With such support, the amendment does not add new matter.

Amended Claim 1 can be distinguished from the cited references on at least three bases. The first two bases were described in Applicants' response on August 15, 2005, and Applicants respectfully submit that, for the same reasons delineated in the prior response, these two bases remain applicable to the pending 35 USC 103(a) obviousness rejection. Specifically, since Crookston (US Patent 5,473,847) fails to teach or suggest a "flexible polyolefin foam" nor use of any such structure below a roof deck and/or within an attic space, nothing from the Crookston publication would lead a skilled artisan to do what the Applicants have done. Specifically, since Crookston's teachings relate solely to materials to be placed on top of the upper surface of a roof deck and, for this, require the use of rigid insulation board, there is no recognition of the problem solved by Applicants' claimed invention and nothing that would lead a skilled artisan to ignore the clear requirement for a rigid foam in favor of a flexible foam or to explore problems beneath a roof deck's lower surface.

A third bases is that amended Claim 1 requires that the second major surface have alternating continuous ridges that separate its longitudinal grooves from each other. In contrast, Crookston discloses an insulation member having intersecting channels for venting air and water vapor to the perimeter of Crookston's roofing system. For example, in column 4, line 64 through column 5, line 5, Crookston describes a plurality of spaced, square projections (or blocks) which extend upwardly from the base portion and form a plurality of interconnected air channels therebetween permitting efficient venting of air or water vapor in both directions over the entire extent of the roof structure. Applicants invention does not have such intersecting channels and such intersecting channels would be undesirable for Applicants' invention. One reason they would be undesirable is because such a structure using the flexible polyolefin foams of Applicants' invention would not give the body structure enough strength and modulus to allow the body to rebound by the at least 20° if it were to be bent at the 90° angle. Another reason is that, as would be recognized by those of skill in the art, Applicants' invention of having longitudinal channels that rise up from the soffit region is more effective for establishing and

Appln. No. 10/751,561
Response dated 22 February 2006
Reply to Office Action of 22 November 2005

maintaining ventilation to an open attic space than if such longitudinal channels were intersected by other channels as described in Crookston.

There is no teaching or suggestion in Crookston or any of the other cited references that would motivate one of skill in the art to address the problem solved by Applicants' invention by modifying Crookston's described rigid member by using a flexible member, removing the intersecting channels, and using it as a unitary attic rafter vent and rafter dam below the roof deck. Based upon the foregoing differences, the teachings of Crookston cannot support even an assertion of prima facie obviousness.

Furthermore, Georgeau et al. (US Patent 6,679,018) adds nothing to the teachings of Crookston that bolsters an assertion of prima facie obviousness. Georgeau et al., like Crookston, addresses materials to be placed on top of the upper surface of the roof deck and uses a rigid insulation board. Nothing in Georgeau et al. recognizes or addresses the problem solved by Applicant's claimed invention or guides a skilled artisan to ignore the clear requirement for a rigid foam in favor of a flexible foam or to explore problems beneath a roof deck's lower surface. The Office's citation to column 4, line 22 relates to a "membrane" rather than a foam. Georgeau et al. teaches application of such a membrane over fiberglass reinforced gypsum board that is bonded to the rigid foam at column 6, lines 1-13. The membrane is not a substitute for the foam. As such, Georgeau et al. fails to establish even prima facie obviousness, either alone or in combination with Crookston.

Gilbert (US Patent 3,879,508), whether taken alone or in conjunction with Georgeau et al., fails to overcome shortcomings evident in a comparison of Crookston's teachings with the pending claims. Gilbert discloses corrugated foamed thermoplastic resin sheet (see Claim 1). Gilbert defines "sheet" as having a maximum thickness of 0.5 inch at column 3, lines 1-8. Although Gilbert mentions use of the corrugated foam in roof insulation at column 4, lines 50-51, nothing in Gilbert suggests that such roof insulation be placed in any location other than atop a roof deck as taught by both Crookston and Georgeau et al. While Gilbert introduces flexible foams at column 2, lines 49-50, nothing in Gilbert pushes a skilled artisan to substitute a flexible foam for the rigid foam so clearly mandated by Crookston. Finally, the foam sheet of Gilbert has a thickness of no more than half of the thickness

Appl. No. 10/751,561
Response dated 22 February 2006
Reply to Office Action of 22 November 2005

specified in pending Claim 5. Based upon the foregoing differences, with no teaching or suggestion in any of Gilbert, Georgeau et al. or Crookston to guide a skilled artisan to overcome the differences, amended Claim 1 and dependent Claims 2-13 are patentable over the cited references.

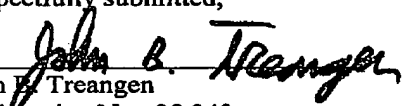
The Office cites Gregory, Jr. et al. in combination with the above references as support for a rejection under 35 USC 103(a). Applicants respectfully suggest that Gregory, Jr. et al. fails to substantiate an assertion of prima facie obviousness, much less obviousness under 35 USC 103(a). Applicants appreciate the Office's citation to reference numeral 12, but disagree with the Office's characterization of the feature assigned to that reference numeral. Gregory, Jr. et al. refer to "12" as a "flattenable perforated corrugated device" at column 1, lines 66-67 and require that it extend "only partially across the width of the top side of the body" at column 2, lines 15-17. Gregory, et al. teaches use of either fiberglass bats or rigid foam planks as insulation materials at column 2, lines 1 – 2 and 34 – 36. Such a teaching fails to motivate a skilled artisan to even try using a flexible polyolefin foam. Gregory, et. al. discloses use of paper or plastic as suitable materials for perforated corrugations used as ventilation baffles. This does not equip a skilled artisan to use a non-perforated film. Gregory, et. al., like the three references discussed above, fails to recognize or address a need for an insulation dam in addition to a need for ventilation. As such, the cited combination fails to establish prima facie obviousness.

In holding an invention obvious in view of a combination of references, there must be some suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to select the references and combine them in the way that would produce the claimed invention. *Karsten Mfg. Corp. v. Cleveland Gulf Co.*, 242 F.3d 1376, 1385, 58 U.S.P.Q.2d 1286, 1293 (Fed. Cir. 2001). None of the cited references recognize and/or attempt to solve the problem that is solved by Applicants' invention and there is insufficient impetus to have led one of ordinary skill in the art to combine the various teachings of these references to make the claimed invention. Even if one were to improperly use hindsight analysis to separately select individual components from the cited references, the resultant modification or combination would still fall short of yielding Applicants' claimed invention.

Appl. No. 10/751,561
Response dated 22 February 2006
Reply to Office Action of 22 November 2005

Applicants respectfully ask the Office to withdraw the rejections of Claims 1-13 and 14 under 35 USC 103(a) and to allow Claims 1-14 together with allowed Claims 15-26 at an early date.

Respectfully submitted,


John E. Treangen
Registration No. 38,343
Phone: (989) 636-1505

P. O. Box 1967
Midland, MI 48641-1967

JBT/akm